

REMARKS

Claims 3, 11-24, and 34-35 have been canceled. Claims 1 and 25-33 have been amended.

The Examiner stated that claims 11-24 stand withdrawn. Claims 11-24 have been canceled.

The Examiner rejected claims 33-35 under 35 USC § 112, second paragraph, as being indefinite. Regarding claim 33, the Examiner stated that the term “snugly fit” is relative in nature lacking comparative basis. Claim 33 has been amended to replace “snugly fit” with “contact”. Webster’s New International Dictionary Second Edition defines for “snug” “Tight; not loose’ as, a snug fit”. Requiring the annular sacrificial substrate holder to be tight with the semiconductor substrate would require that the annular sacrificial substrate holder be in contact with the semiconductor substrate. The word “contact” is being substituted for “snugly fit”, since the applicant believes being in “contact” is less relative.

The Examiner rejected claims 1-3, 7-10, 25, and 29-35 under 35 USC § 102 as being anticipated by Wicker et al. Claims 1 and 25, as amended, require that the sacrificial portion of the sacrificial substrate holder be of a substantially pure metallic material. Wicker et al. does not disclose that the sacrificial portion of the sacrificial substrate holder is of a substantially pure metallic material, as recited in claims 1 and 25. In addition, claim 1 recites the steps of first placing the substrate in the holder and then placing the holder and substrate together in the chamber. Wicker et al. does not teach placing the substrate in the holder and then place the holder and the substrate together in the chamber. For these reasons, claims 1 and 25 are not anticipated by Wicker et al.

Claims 2, 7-10 are dependent on claim 1 and for this reason is not anticipated by Wicker et al. Claims 29-32 are dependent on claim 25 and for this reason is not anticipated by Wicker et al. Claim 33 is dependent on claim 25 and further recites that the annular sacrificial substrate holder is in contact with the semiconductor substrate. Wicker et al. does not disclose that the annular sacrificial substrate holder (14 of Wicker et al.) is in contact with the semiconductor substrate. For these reasons, claim 33 is not anticipated by Wicker et al. Claims 3 and 34-35 have been canceled.

The Examiner rejected claims 4-6 and 26-28 under 35 USC § 103 as being unpatentable over Wicker et al. in view of Abraham and Abraham et al. The Examiner stated that Wicker et al. fails to teach etching aluminum using a gas containing chlorine, but that such processes are disclosed by Abraham and Abraham et al. and that it would be obvious to change the focus ring of Wicker et al. to allow aluminum etching.

As discussed above, claims 1 and 25 have been amended to require that the sacrificial portion of the sacrificial substrate holder is formed from at substantially pure metallic material. Wicker et al. in column 3, line 43 to 49, states that what the Examiner describes as the substrate holder 14 is a “focus ring”. Enclosed in US Patent No. 5,998,932 to Lenz, which describes the

working and function of a focus ring. Lenz, in column 2, lines 4 to 11, states that a focus ring improves equipotential field uniformity across a substrate surface, by providing a focus ring formed of a suitable dielectric material. Since such focus rings are formed from dielectric materials, they cannot be formed from substantially pure metallic material, which is electrically conductive. Although Abraham and Abraham et al. teach the etching of an aluminum layer in a TCPTTM 9600 SE plasma reactor, they do not suggest or make obvious forming the focus ring taught in Wicker et al. from a substantially pure metallic material.

Claim 4 is dependent on claim 1. Claim 4 further recites that the substantially pure metallic material is substantially pure aluminum. As discussed above, it would not be obvious to form the focus ring of Wicker et al. from a conductive substantially pure metallic material. Even more, it would not be obvious to form the focus ring of Wicker et al. of substantially pure aluminum. For these reasons, claim 4 is not made obvious by Wicker et al. in view of Abraham and Abraham et al.

Claims 5 and 6 are ultimately dependent on claim 4. For this reason, claims 5 and 6 are not made obvious by Wicker et al. in view of Abraham and Abraham et al.

Claim 26 is dependent on claim 25. Claim 26 further recites that the substantially pure metallic planar upper surface is substantially pure aluminum. As discussed above, it would not be obvious to form the focus ring of Wicker et al. from a conductive substantially pure metallic material. Even more, it would not be obvious to form the focus ring of Wicker et al. of substantially pure aluminum. For these reasons, claim 26 is not made obvious by Wicker et al. in view of Abraham and Abraham et al.


Claims 27 and 28 are ultimately dependent on claim 26. For this reason, claims 27 and 28 are not made obvious by Wicker et al. in view of Abraham and Abraham et al.

Applicants believe that all pending claims are allowable and respectfully request a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at (831) 655-2300.

If any fees are due in connection with the filing of this Amendment, the Commissioner is hereby authorized to charge such fees to Deposit Account 50-0388 (Order No. LAM1P061).

Respectfully submitted,

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